

# Aviator Sees Sporting Chance to Reach Roof of World

**Roland Rohlf outlines Plan for Conquest of Mount Everest, Based on Scientific Data and His Own Experiences in Even Higher Altitudes**

Man has reached the North Pole, man has reached the South Pole, man has braved ocean depths in diving devices and submarines, man has flown to altitudes far higher than the earth's loftiest peak, and across vast marine wastes. To set foot on the roof of the world, the crest of Mount Everest, is the one great feat of exploration remaining to be achieved, and this is the goal in a new and daring enterprise.

By ROLAND ROHLFS.

WHEN I first read in the newspapers of a possible attempt to scale Mount Everest, the highest peak in the world, I decided that it could not be done. As I am neither a mountain climber nor an expert on Himalayan peaks this may seem presumptuous, but I have been higher than Mount Everest in a plane and I know the exertion required even to lift a hand in the partial vacuum due to the rarefied air, and I know, too, how horrible it is to attempt to fill the lungs with that thin cold air, how quickly consciousness begins to leave one and how good it feels to draw breath after breath of pure oxygen from a compression tank.

Major Rudolph W. Schroeder, who is a good friend of mine, even though he did break my altitude record, knows what hardships face the man who attempts to reach such an altitude as Mount Everest's top. For at the peak of Schroeder's record climb his oxygen apparatus went wrong and he fell more than five miles before he recovered consciousness and got his ship under control again.

But although the attainment of the peak of Everest, 29,140 feet above sea level, is difficult almost to impossible, I believe it can be done by making use of man's latest and I think best means of transportation, the airplane. It is difficult, if it wasn't man would have done it long ago. I don't recall, offhand, anything easy that man hasn't done. It is dangerous, but danger has never halted man in his endeavor. He is the location of the North Pole, the study of the X-ray, or merely setting somewhere in a hurry.

Noted Aviator Assures Readers

**His Plan of Ascent Is Scientific**

The plan I propose is, of course, not perfect, but I believe it is scientifically possible. The scientific phase of the matter is something I desire to emphasize, for I do not want my friends to think that I jump on the head just before the Gordon Bennett race, and let me say, off than I was before. Granted that the stunt is risky, hard and unpleasant, granted, too, that chance may best science as it has in the past, in the first attempt, it is nevertheless scientifically possible. There is quite a sporting chance that the first man to reach the summit may never leave it. The sporting chance is with us when we cross Broadway and I rarely see it refused by man, woman or child.

The peak of Mount Everest could be attained only after months or even a year or two of preparation. This would be true of either a force which proposed to climb the mountain carrying oxygen for the man to make the final dash or of a force which proposed to send two men in a plane over the top. Personally I simply cannot see the climbing proposition at all. Dropping on the difficulties of the climb, the ice, snow, other places, and other obstacles, the mere reaching of a man's body to a height of 29,140 feet by his own efforts is terrific. And when you add to the mere climbing the fact that from 18,000 or 20,000 feet up upward he must carry, too, an oxygen tank and wear exceedingly thick and heavy clothing, it would seem that only a superman could do it.

The Duke of the Abruzzi, I note, reached on K-2, another Himalayan peak, an altitude of 24,600 feet, the present world's record, before he was compelled to descend. I don't know how he got that far, but I think he must have most remarkable powers of endurance, and I doubt if this record is ever beaten by any great distance. Herschel C. Parker, I understand, has said he believes 25,000 feet to be the limit in mountain climbing.

Coming down to earth, the first task before an expedition which plans to send a man by plane to the summit would be to locate a base. This would not have to be a movable base, such as would be required by a mountain climbing party. Preferably this base should be in the lee of the mountain as regards the principal prevailing wind. Two or three bases with sufficient space for a plane to land, grouped triangularly about the peak, would be better, but not absolutely necessary. The first big advantage possessed by an airplane expedition would be the fact that this base could be as far as 100 miles from the peak without endangering success. In the last of course the nearer it was the better, but 100 miles. It would seem to be enough allowance of distance to assure a landing field even in the scrambled topography of this highest of all mountain chains. Some clearing of a likely spot might be necessary. The 100 miles which would mean weeks of travel for an expedition laden with the impedimenta of a mountain climbing expedition would be a matter of something under an hour for the airplane.

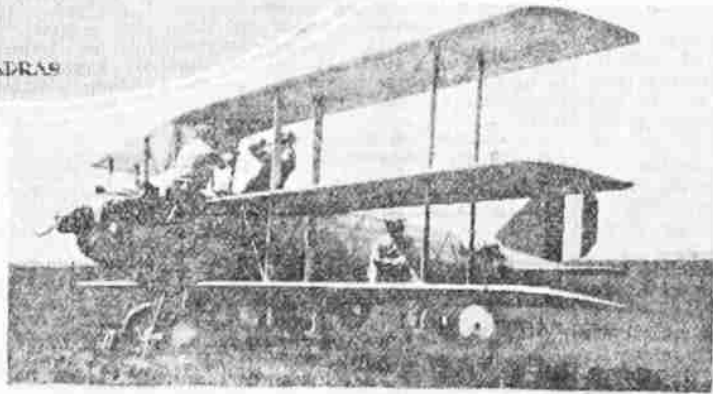
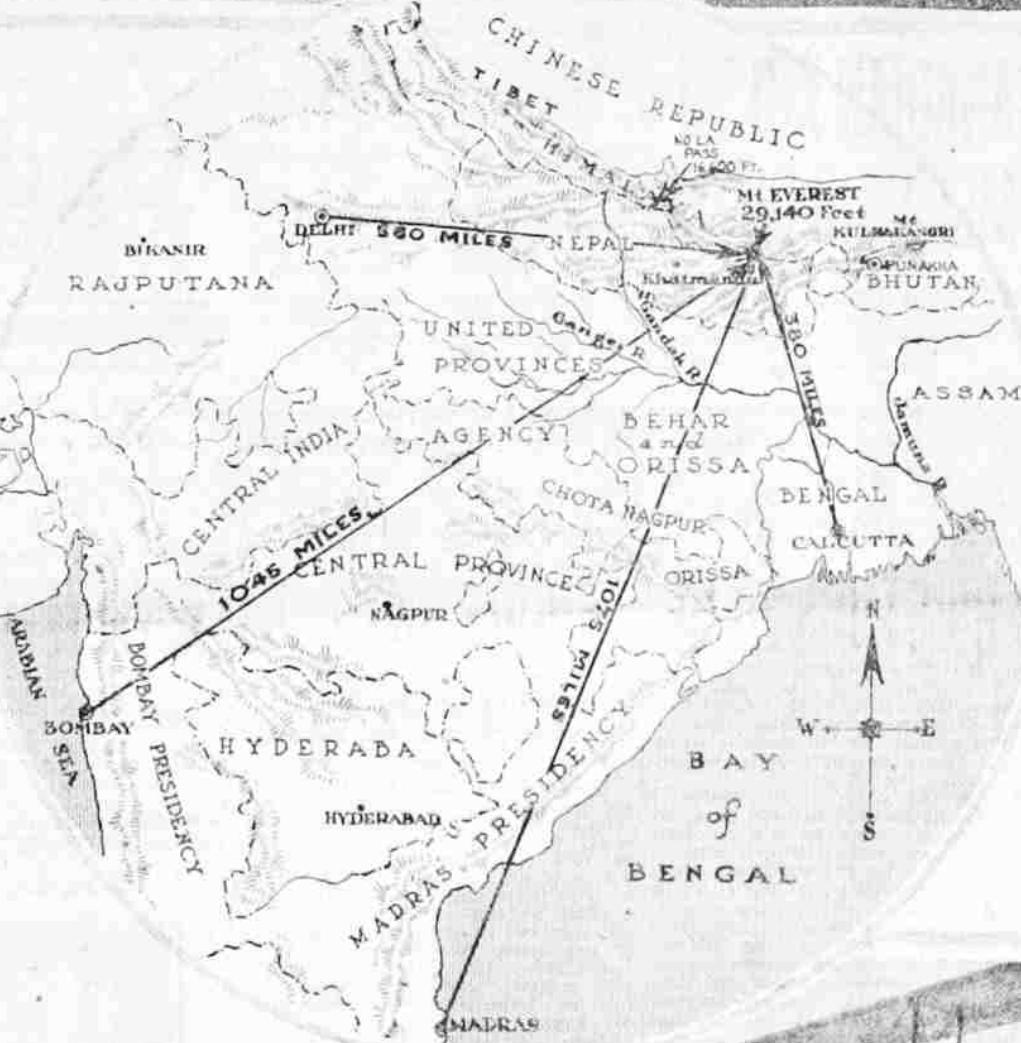
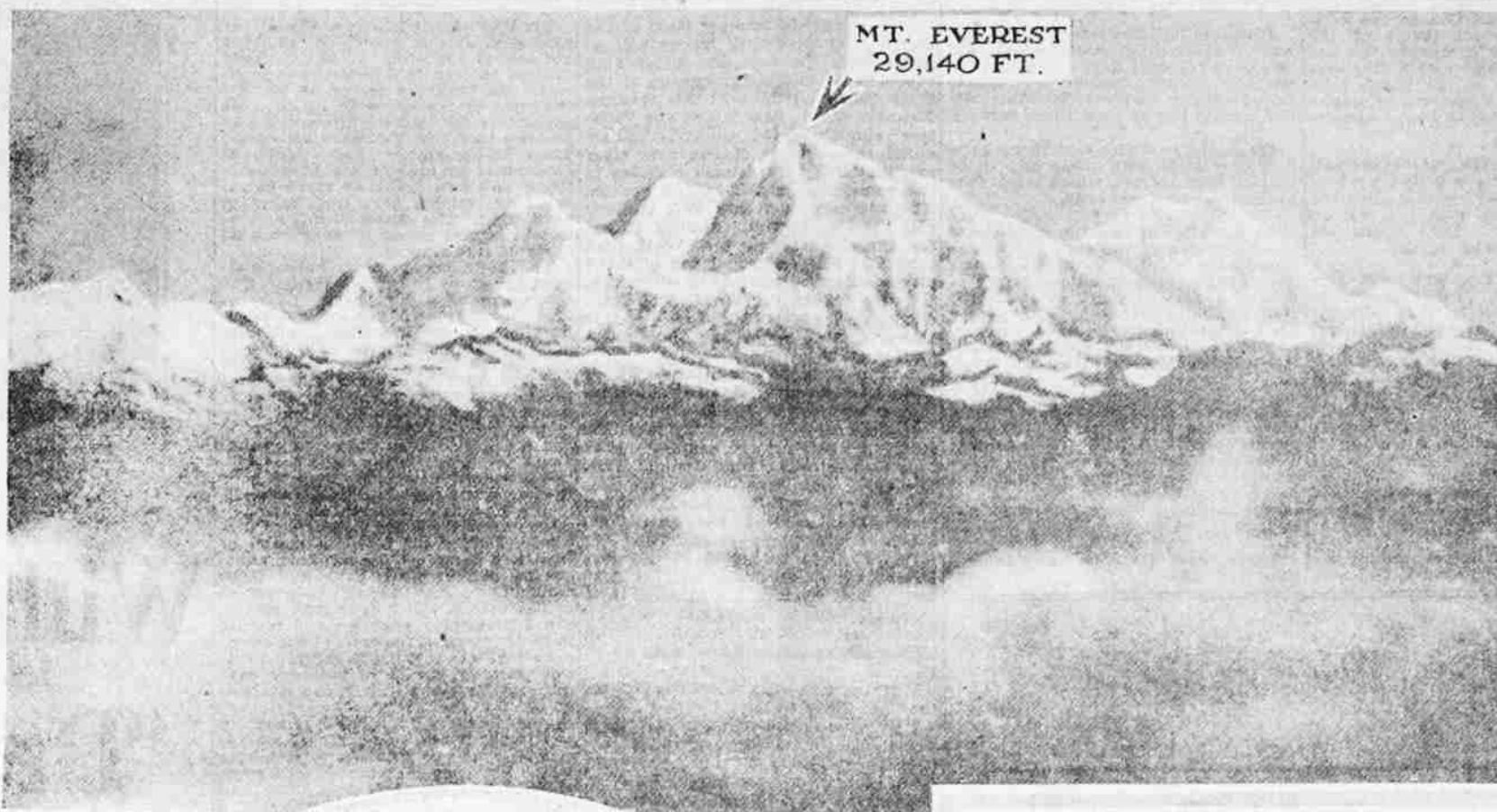
Once settled at the base the pilot and the man who expects to land on the peak would not take off, zoom up to 29,140 feet and accomplish the stunt. They would just start in clearing away the many difficulties, one by one. But before this is described it might be well to say something about the plane itself.

**Curtiss Wasp Triplane**

**Might Accomplish the Task**

The plane used by Major Schroeder and the plane I piloted in altitude climbs were not built for the work. Both were war models which had high speed and high climbing ability, but were not built for "coiling" work alone. Consequently I think I am entirely safe in saying that it would be comparatively easy for a good engineer to build a plane which could carry two men, oxygen, other supplies, to a height of thirty-thousand feet or so instead of one man and accessories. Personally, I believe the Curtiss

New picture of Mount Everest, the giant peak of the Himalayas and the loftiest summit in the world. The most recent survey gives it a height of 29,140 feet. Map shows the distances from Mount Everest to large places in India where climbing expeditions might be organized.



Curtiss Wasp triplane used in altitude climbs and which Rohlf says could be modified to make the Mount Everest attempt.

Wasp triplane, with a little area added to the three wings, and a few improvements would be satisfactory. The increased area would cut down the speed somewhat, but when you have a top speed of 162 miles an hour you can afford to drop a few miles.

The reason I like a triplane is that it has a greater range of speed than a biplane. This range is important in our expedition. The Wasp, for instance, varies between 50 and 162 miles in landing with the throttle open to the last notch.

The base should be on the lee side of the mountain because in the unlikely event that the motor quit work on one of the flights it would probably be possible to glide back to camp. A plane will glide seven feet for every foot of height with a "glad stick" that is, a propeller not pulling, and to this distance the wind will add much more.

The first flight over the mountain would be purely for purposes of observation. Nobody knows much about Mount Everest. I understand, and photographs have been taken only from a distance of almost one hundred miles. The pilot and the observer, therefore, must look over the ground and take a few pictures themselves at close range. That height of 29,140 feet, too, sounds suspiciously accurate for a figure derived from intricate triangulation at great distance, and some one may have skidded in mathematics or observation. It may be appreciably higher or lower.

Other things which must be noted on this and subsequent flights are the winds, their strength, direction and variety, the temperature of the air at the altitude of the peak, the topography of the ground all around the mountain and, most important of all, the actual formation of the peak and the areas below the peak.

The temperature isn't of as great importance as the winds. We know it is cold up there. If it is anything like six miles up on Long Island it is 44 degrees below zero, Fahrenheit. This even behind the windshield of a plane, is cold, incomprehensibly cold. But it is merely one of the things that take this out of the easy class.

The winds are important. Smoke bombs must be thrown on the mountain and on the peak, if possible, in order to get some idea of local wind currents. Let us hope, for reasons that appear later, that the prevailing wind at the summit is leading somewhere at between fifty and one hundred and fifty miles an hour. Personally I think the wind speed will be between fifty and one hundred miles. At thirty thousand feet I have headed into winds of 175 miles an hour. The altitude record I made was established forty miles east of Garden City, but I was heading westward at top speed all the time. The wind simply pushed me back. I don't expect such

terrible gales at Everest, for the reason that the friction of surrounding mountains, even though at considerably lower altitudes, will cut down the rate.

The two men who make the attempt must be closer than brothers, for they must, at the crucial moment in the expedition, act as one piece of machinery. They must of course be skilled airmen, a qualification not so unusual as before the war struck us, and they must have had considerable experience in altitude work so that they will be as much at home physically in the rare air as possible for men to be. That isn't very much at home, I may add. During the first flight, and during all the others, they must become accustomed to read the slightest sign or motion of the other, must almost read the other's mind. Conversation with a four hundred horsepower motor roaring ahead, and with a wind carrying all utterances astern at 100 to 150 miles, is an impossible luxury six miles up, particularly since each man's face is covered by a mask and he is pulling for dear life at a tube connected with the life-giving oxygen tank. It is a sign language or nothing.

In these trial flights the men must study that great summit. It may be a mere pinnacle, a shaft of rock upheaved higher than all; its fellows in the birth of the world as we know it. It may be a plateau hundreds of feet across. It may be a rounded surface sloping gradually to steeper declines. But whatever the peak is, it must be studied from every side as the plane circles around it, coming nearer and nearer, but keeping sufficiently far away to prevent a chance gust from dashing the plane upon it.

If the summit is a steep pile of rock for thousands of feet the expedition is through. If the summit has on or within hundreds of feet of it a comparatively level place, the size of the top of a freight car or larger,

the expedition is just starting. For on that spot I think it entirely possible to land from an airplane in full flight the man who is to have the honor of reaching the highest point in the globe.

Before the reader has time to conjure up just what a man who had landed on a mountain peak from an airplane travelling 150 miles or less would look like let me say that he will be alive, uninjured but rapidly freezing to death. Moreover, the man will have an even better chance of getting away than he had in getting there, which is all that could be expected by a sportsman.

Among the things that the world had carefully catalogued as impossible a year or two ago was changing from one plane in flight to another. Then Norman Locklear did it and the world hunted up something else to call impossible. The same principle Locklear employed can be used in this instance. His two planes were each travelling sixty miles an hour. But they were travelling this speed in the same direction, so relatively they were not moving.

The airplane from which the pioneer visitor to Everest will descend will not be moving at all, yet its motor may be roaring full on. For the plane will be heading into the wind at precisely the same speed at which the wind is shooting by it. In other words, if the westerly movement of the wind is at the rate of seventy-five miles an hour the easterly speed of the plane will be seventy-five miles an hour, and the result, or motion in relation to the earth, will be zero.

This may seem to be one of those conditions which are theoretically true but actually impossible. It may be thought that it simply could not be done on top of a mountain or anywhere else in real life. As a matter of fact, however, men have changed from airplanes to automobiles and to freight

cars and back again. In those cases it was the air that was stationary and the points of departure and arrival that were moving. In this case it will be the plane and the air that are moving and the mountain which is still.

Of course there are difficulties in the way. The air may be so bumpy or rough that near the wind. The pilot, meanwhile, will zoom upward and away from the mountain and start circling around.

Once sure of his footing the man on the mountain the plane will dance like a crazy thing. In this case the expedition is off, at least for that day. I believe, however, that a day will come, perhaps after weeks or months of waiting, when the wind currents are blowing parallel to a level spot in a fairly smooth stream.

The pilot will keep his most unwavering attention on the height of the plane above the landing place and its zero speed while his partner climbs down a weighted rope ladder suspended from the axle of the plane. He will be climbing in a wind blast of from fifty to a hundred miles an hour, or even more. He will be handicapped and numbed by the icy wind. He must be carrying strapped to him not only a small oxygen

**Famed Pilot Tells of Great Risks Involved, Including Stunts Like Changing Planes in Flight, and How Disaster May Be Avoided**

bottle with hose attached to his mask, but also a parachute folded tightly against his back. Once down on the ground or ice his first move will be to fling himself flat to the ground or catch hold of some projection to prevent himself from being carried away by peak will work quickly. A man cannot live long under such conditions, even with oxygen and the warmest of warm clothes. His first step will be toward some of the padded bags containing oxygen tanks, additional clothing and other supplies which have been thrown near the spot upon which he first landed. These bags would be brightly colored in various hues easily distinguishable. The oxygen supply in the small bottle he carried with him would last only for ten or fifteen minutes and he must get a bigger bottle to attach to the tube projecting from his mask. If instruments for scientific observations are required they may also be contained in these bags. Unlike his theoretical rival, the climber, the man on the mountain top can in advance decide upon taking with him anything he wishes. These bags, if they contained anything of great weight, would, of course, be planted on a previous flight made only by the pilot. The different colors would enable the adventurer to tell the difference between one containing oxygen and one with food or anything else.

The parachute strapped to the back of the man on the mountain is needed not only for the ordinary possibilities of trouble in the air, but also in the event that the landing in the great wind is made at a place where steep slopes are menacingly near. If he did go over it is certain that the terrific wind would blow him clear of the mountain.

Some first hand experience convinces me that a man who wants to leave a mountain top is the teeth of a howling gale may do so without trouble. In order to test out a parachute I intended using in the Gordon Bennett race I went to a place in the desert with the silk life saver strapped securely in my back. We were making seventy-five miles an hour as I crawled out on the wing to make the jump from the tip in order to avoid the tail. In that wind speed it was possible to move, although the pressure on the body was decidedly heavy. At the tip, looking backward, I gave the ring a jerk. I had packed that parachute myself, and I was certain I had done it right, so I was highly interested in the result.

The big silk bundle shot out in a jumble of cords and material until it reached the end of the cords attaching it to me. Then suddenly the parachute opened wide. Instantly I was jerked out of the wing. For a few seconds thereafter gravity had absolutely nothing to do with my movements. I was pulled horizontally backward for hundreds of feet before I lost a foot of altitude. Then my weight pulled down under the big silk umbrella, and, oscillating considerably, the chute and I started for earth. We got there. That experience convinced me that in free moving air a man has little to fear in leaving such abrupt delivery as a mountain peak.

**How the Successful Aviator**

**Will Plant His Flag on Summit**

Returning to our man on Everest, he must, after getting his big oxygen bottle, climb to the peak. If he is not already there, plant his flag, or make his observations, and get ready to leave before his circulation quits. His highest difficulty is going to be to keep his fingers warm. Even with the warmest of fur lined burkha gloves they may become like clubs on the way down the ladder. In the plane, of course, electric gloves with a warming current from a storage battery or generator are used in this sort of work.

While the observer is on the mountain the man in the plane will be busy taking photographs of him from the air. For this a special airplane camera attached to some part of the plane and operated by a trigger in the pilot's cockpit is used. This type, like a fixed machine gun, is sighted by heading the plane at the object to be photographed or shot and then letting go the trigger.

Fifteen minutes or half an hour after the plane has landed he will be ready to leave. He has two alternatives. If the wind is still favorable he may crawl behind some rock or ice bank while the pilot manoeuvres directly over him and gradually settles down so the rope ladder, twenty or thirty feet long, dangles before him. Then up that ladder, with his oxygen tank and parachute, he must climb to safety in the plane. If this is not feasible he still has a method of leaving the mountain. That is the parachute. As the one he carries on his back is an emergency chute of quick descending pattern, it will be advisable to use another, which is, of course, in one of the bags previously thrown overboard. The bigger the chute the faster and further he will be carried from the peak or the edge of the precipice from which he makes his little leap. In this case he isn't at all sure where he is going to land, but he is headed for thicker air and solid earth.

As he glides downward into the almost unknown territory around the mountain the plane will follow in order to observe the spot where he lands. The maps or plans made of the country beforehand will be valuable here, for the pilot will probably be unable to land within miles of the chute jumper. Once landed the big difficulties are over. For the man out in the wilderness is hooked up with his camp by the plane, which can bring him maps, compass, food, firearms, or anything else he requires.

The conquest of Mount Everest by airplane may seem weirdly imaginative, but I am convinced that if the peak is ever reached it will be in this or some similar way. The human heart has certain limitations very easily reached in high altitudes, and if man cannot get to Mount Everest's high point by the most improved method of transportation he cannot get there by the most primitive.

Such an expedition would be long, costly, dangerous and unpleasant, but it would be interesting, and the pursuit of the interesting is closely connected with the pursuit of happiness. Why not be blown off the highest mountain peak in the world trying to do something worth while when any day a germ may lay you low?

ROLAND ROHLFS.